Cognitive Service Management

Future of Service Management

bmc helix

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The BMC POV

The effects of digital transformation are already here. Recent IDG MarketPulse research conducted on BMC's behalf found that more than seven out of 10 organizations surveyed had already made changes to their operations, processes, or technologies to enable digital transformation, either enterprise-wide (44%) or at a departmental or business-unit level (28%).

That's both a mark of how many digital transformation initiatives are already underway, and of how much work remains ahead. Digital transformation continues to top the priority lists of IT executives, and this is a matter of necessity rather than trend-chasing: three out of four companies that make up the S&P 500 are predicted to be displaced by 2027, according to Constellation Research.

It's unsurprising, then, that enterprises are embracing the very same technologies that are enabling so much digital disruption, including cloud, IoT, and cognitive disciplines such as AI and machine learning.

Transformative Trends: Multi-Cloud, IoT, and Cognitive

We expect this year to feature three dominant technology trends that are inextricably linked to critical digital transformation goals, such as improved efficiency, productivity, data accuracy, customer satisfaction, and business agility.

Multi–cloud becomes the norm. Multi-cloud strategies are becoming an everyday reality. More than half (52%) of respondents in the IDG MarketPulse report already have a multi-cloud environment, and another 36% indicated definitive plans to implement a multi-cloud approach.

Enterprise IoT projects skyrocket. Enterprise IoT use cases are still in their early stages, but they're about to grow up in a hurry. Forrester says that B2B IoT applications are poised to "take off" in terms of adoption. vand analytics will be the fastest-growing category, according to Bain.

AI and RPA fuel the journey to the Cognitive Enterprise. We are entering the era of the Cognitive Enterprise, one in which technologies such as AI and robotic process automation (RPA) will help remake employee and customer experiences, and are becoming inextricably linked with digital transformation. Four out of five respondents in IDG's MarketPulse survey rated cognitive technologies, such as AI, chatbots, virtual agents, machine learning, and RPA, as highly important to digital transformation success. Forrester calls AI "transformative [and] a future change agent to operations" and predicts that AI and RPA will "join forces" to create new "digital workers" in 40% of enterprises.
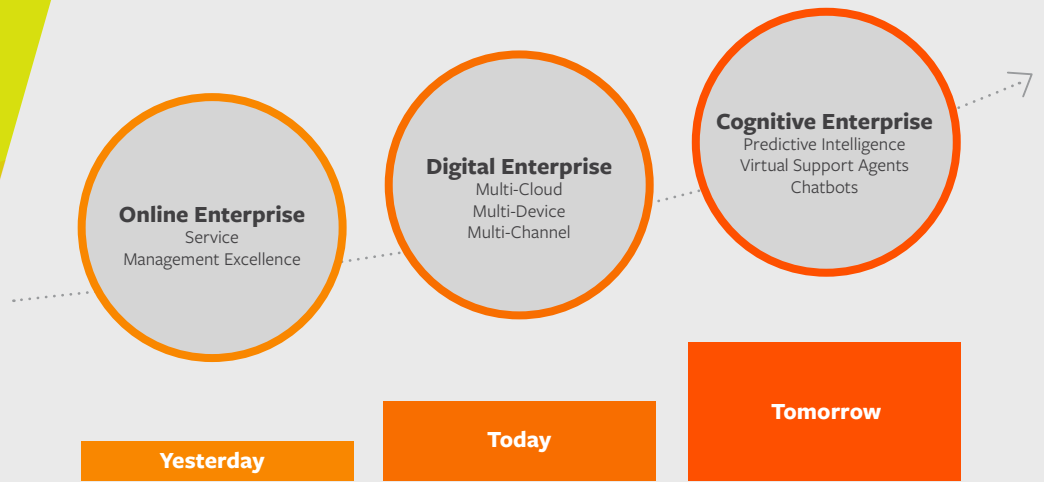
These are the foundations of digital transformation that will enable businesses to remain competitive in our digital future. They also bring with them ever-increasing complexity that human effort and manual processes alone can't sustainably support, especially when it comes to IT service management.

Welcome to the Age of Cognitive Service Management

At BMC, we've been asking a crucial question: What does all of this mean for the future of service management? One thing is clear—Traditional ITSM is no longer sufficient to meet the increasingly complex demands of the multi-cloud, multi-channel, multi-device world. IT must transform both the way services are delivered as well as the human and business components of service management.

Enter Cognitive Service Management. CSM embeds emerging technologies like AI, machine learning, and RPA throughout the enterprise, improving every layer of service delivery and enhancing experiences for customers and employees alike.

A foundation of the Cognitive Enterprise is the human-to-machine partnership. The increasing adoption of cognitive technologies such as AI and machine learning doesn't mean companies replace people with machines; rather, these technologies will better enable people to do their jobs, now and in the future. Done right, the Cognitive Enterprise improves experiences for everyone, from service desk agents to end users.

Traditional ITSM is no longer sufficient to meet the increasingly complex demands of the multi-cloud, multi-channel, multi-device world.

Online Enterprise
Service
Management Excellence

Digital Enterprise
Multi-Cloud
Multi-Device
Multi-Channel

Cognitive Enterprise
Predictive Intelligence
Virtual Support Agents
Chatbots

Yesterday

Today

Tomorrow

The Journey to the Cognitive Enterprise

Moving from human-intensive, manual processes to become a more automated, cognitive organization is certainly a significant shift for many companies. Not only can it be done, but it must be done as a matter of competitive necessity.

As companies modernize and push full speed ahead with digital transformation initiatives, they increasingly find that traditional ITSM can't keep up with their current and future needs.

Challenge #1: As the number of clouds proliferate in multi-cloud settings, it becomes difficult for traditional ITSM to effectively, efficiently deliver services across these diverse, distributed environments.

Challenge #2: Today's professionals want their services across a vast array of channels, from Slack and Skype to social media, websites, and more. Again, traditional ITSM can't keep up with the pace and scale of multi-channel service management.

Challenge #3: IoT is bringing a nearly limitless number of new devices into organizations, and companies have a hard time inventorying, securing, and managing those devices and then effectively delivering services to them.

At the heart of each of these emergent challenges is a lack of automation. Yesterday's ITSM processes and systems are too inefficient, slow, manual—and, as a result, too expensive. Cognitive Service Management integrates technologies such as AI and machine learning throughout the enterprise, fueling the journey from the enterprise of yesterday and today to the Cognitive Enterprise of tomorrow.

What Cognitive Service Management (CSM) Can Offer Customers

Cognitive Service Management epitomizes how enterprises are using cognitive technologies such as machine learning and natural language processing to deliver significant, tangible value to both internal users and external customers. CSM generates considerable benefits, including:

Omni-channel experience

Today's users expect their digital experiences to work wherever and whenever they want them. This means service management must be far more dynamic than ever to support these multi-channel and multi-device interactions. CSM must enable choice of any cloud, discovery anywhere across increasingly distributed and diverse environments, and increasingly intelligent, intuitive experiences via cognitive capabilities such as chatbots and virtual agents.

Cognitive automation

Service delivery in the digital age requires far greater levels of automation than in the past; manual effort and processes can't keep up with the growing complexity of multi-cloud and IoT. Cognitive automation capabilities empower service desks to automate repetitive tasks and focus on more complex problems. CSM must leverage automation to ensure services can run anywhere in a scalable manner, turn virtually limitless amounts of data into actionable insights, and proactively remediate service health issues without always needing manual intervention.

Freedom and flexibility

Similarly, CSM needs to support related shifts in how services are deployed and operated in multi-cloud and hybrid environments. Today's IT teams must manage increasingly complex, dynamic environments to ensure the company can operate efficiently and achieve its critical business goals. This requires new approaches and technologies that empower scalable, cost-effective results while ensuring future flexibility and not getting locked down by a particular platform. Containers are a prime example of how enterprises are executing this strategy: IT teams are embracing the power of containers to unlock the flexibility and scalability of their multi-cloud and hybrid cloud environments, while also avoiding vendor lock-in. CSM must also enable effective performance monitoring, security and compliance, and cost and capacity optimization in these dynamic, distributed computing environments.

A CSM solution must integrate fundamental technologies to deliver these capabilities.

▶ **Machine Learning**

Deloitte defines machine learning as "the ability of statistical models to develop capabilities and improve their performance over time without the need to follow explicitly programmed instructions." This is crucial for more proactive, predictive service management that does not depend wholly on repetitive human intervention, especially as systems and processes scale.

▶ **Robotic Process Automation (RPA)**

Deloitte defines RPA as "software that automates repetitive, rules-based processes usually performed by people sitting in front of computers." Like machine learning, it is an increasingly important enabler of effective service management in the multi-cloud, multi-device, multi-channel environments that typify the modern enterprise.

▶ **Natural Language Processing/Generation (NLP/G) and Speech Recognition**

These two related technologies are key to ensuring that chatbots and virtual agents can deliver effective, satisfying user experiences.

▶ **IoT**

With so many new devices (and corresponding applications) coming online, CSM needs the ability to discover IoT stacks everywhere and connect with major IoT platforms.

Business Benefits of Cognitive Service Management

CSM delivers key business outcomes for the Cognitive Enterprise, leaving behind the inefficient, inaccurate manual processes and systems in favor of:

Greater speed
CSM helps organizations keep pace with the speed of their multi-cloud, multi-device, and multi-channel environments, replacing slow, inefficient manual processes and systems with proactive, predictive cognitive capabilities such as chatbots and virtual agents.

Improved accuracy
Cognitive capabilities such as machine learning improve the accuracy of issue identification, routing, and resolution, leading to greater customer satisfaction.

Optimized costs
Cognitive capabilities such as machine learning improve the accuracy of issue identification, routing, and resolution, leading to greater customer satisfaction.

CSM is essential to attaining competitive advantage, enabling key business outcomes.

Greater Speed

Improved Accuracy

Optimized Costs

3 Cs for Your Future-Ready Enterprise

CLOUD
Everything-as-a-Service
(ITSMaaS, DaaS, DWPaaS
& BWFaaS)

CHOICE
Run your choice
of multi-cloud
(BMC, AWS, Azure)

COGNITIVE
Transform from ITSM
to CSM by embedding
cognitive capabilities

BMC Helix: Your Cognitive Approach

Cognitive Service Management brings everything together to ensure your organization maximizes its multi-cloud, cognitive, and container investments and meets its business objectives.

That's just what BMC has done. We've transformed our longstanding, industry-leading ITSM suite into a Cognitive Service Management platform that meets the needs of the Cognitive Enterprise—today and in the future.

Meet BMC Helix, a SaaS offering that delivers fast, accurate, cost-effective cognitive service management for the complex demands of your multi-cloud, multi-device, and multi-channel environments. Our approach empowers the Cognitive Enterprise with:

Choice of cloud with containers
Future-proof your organization by ensuring you can leverage the power of containers and run your cloud of choice.

Omni-channel service experience
Your users get what they need where they want it, creating a truly multi-channel, multi-device experience.

AI platform-agnostic flexibility
The BMC Helix offering can integrate with your preferred AI platform, be it Watson/Tensorflow, Lex, or Cortana.

BMC's approach is your cognitive advantage. The BMC Helix solution is a CSM platform for the enterprise of today and tomorrow: a robust multi-cloud, multi-channel, and multi-device environment powered by the human-machine partnership that will characterize the future of service. The future is CSM. The future is BMC Helix.

Learn more about CSM and how the BMC Helix solution is empowering the Cognitive Enterprise at bmc.com/helix and bmc.com/cognitive ▶